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(54) POROUS MEDIA HEAT SINK APPARATUS

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(57) ABSTRACT

A porous media heat sink usable as a small heat exchange device to air-cool a high power dissipation rate object in a low-noise environment. The heat sink comprises a thermally conductive base, a plurality of thermally conducting fins coupled to the base and oriented substantially normal or perpendicular to the base, and a plurality of thermally conductive porous media elements interleaved between the fins in a serpentine or sinusoidal configuration and arranged with respect to the heat sink base such that the longitudinal axis of the sinusoidal configuration is substantially normal to the base and substantially parallel to the fins. The base of the heat sink is thermally coupled to the component generating heat, typically a microprocessor package, to facilitate heat dissipation.